

Assumptions and General Comments about the Matrix

The matrix is a summary of nearly 100,00 records dating from 1988 for onshore RIK contracts and 1994 for offshore contracts. These records are taken from 2014 data that was actually billed by month from the RIK section. In many cases, records were incomplete and assumptions had to be made:

Onshore:

All records and values were compared to the Wyoming Sweet Spot Price as reported for each month in Platt's Oilgram. This oil's gravity is 39° API. Gravity adjustments were made to match the RIK oil to the spot price via Amoco's onshore gravity adjustment scale of \$.15 per degree.

In many cases, gravity was not reported to MMS. In these cases, we took an average gravity for the unit or area and applied it to the leases that were absent gravity. If there was no gravity reported for the unit or area, we used the average gravity from all leases in the particular contract.

No additional deductions or allowances for transportation were taken.

Offshore:

All oil taken in kind offshore was categorized as to oil type (LLS, HLS, EI) and compared to the appropriate spot price as reported in Platt's Oilgram. Gravity adjustments were made using Shell's offshore adjustment scale found in their posted price bulletins (\$.15 per degree above 45° and below 35° and \$.02 per degree between 35° and 40°).

In some cases, gravity was not reported, or it fell out of a range of 15° to 59.9°. We used a weighted average gravity by area (taken from 1996 Form 2014 data) and applied it to the gravity-absent leases (ex. High Island was 36.6 degrees, etc.).

Transportation allowances were made to equate the spot price to the location where the oil was delivered. We used FERC tariffs where they existed, and this covered the majority of the oil. However there were some delivery points where a tariff was not available, in these cases we used a value of \$.50 to approximate transportation.

Pacific RIK leases were not included in this estimate. They may be done separately if needed.

Audit Burden:

We used an estimate of 1.29 hours per lease month for audit burden. This number is based on an estimate of 62 hours per lease for a one-year audit (two sample months at 31 hours per month). This equates to 5.2 hours per month per lease. We assumed that only 25% of the leases would be selling oil at arm's-length and would thus be the focus of any audit work. Therefore 25% of 5.2 left us with 1.29 hours per lease as a general estimate of audit burden.

The only leases that we had record of being audited are the Rangely, Colorado leases, and the Hartzog Draw, Wyoming, leases. We know that Rangely was a complete value audit, but we do

not know if Hartzog Draw was value and volume or only volume. We were not aware of any audit work offshore.

Collection Risk:

The matrix contains no collectability estimates, although they could easily be added.

Database Format:

This data is in an Access database that can be manipulated if other work is needed. See Mary Turton for specifics.

SUMMARY OF POTENTIAL LIABILITY FOR RIK VALUATION ADJUSTMENTS

CONTRACT	CONTRACT DATES	States Covered	BARRELS TAKEN	BILLED AMOUNT	ADJUSTED AMOUNT
AGE Refining	Jan 95-Jul 97	Offshore	4,635,076.26		
Gary-Barrett Refining	Dec 95 -	Offshore	11,394,708.58	X-4	X-4
Calcasieu Refining	Nov 94-	Offshore	8,630,156.70		
Canal Refining	Feb 95-May 97	Offshore	592,897.41	scribble	X-5
Gary-Williams Refining	Nov 94-	Offshore	6,199,894.18		
Giant Industries	Nov 94-	Offshore	9,791,488.79		
Gold Line Refining	Feb 95-Jun 97	Offshore	5,486,584.79		
LL&E	Nov 94-Jul 96	Offshore	4,941,461.45		
Placid Refining	Nov 94-	Offshore	9,783,744.19		
Total Offshore			61,456,012.35	\$	
Big West Oil Company	May 87-Jun 98	9-ND,25-UT,26-WY	5,918,270.54		
Gary-Williams Refining	Jun 87 - Sep 97	49-WY,2-MT	3,415,697.55		
Sinclair Oil	May 87-Mar 97	1-CO,9-MT,77-ND,1-UT,239-WY	15,630,498.74		
Wyoming Refining	May 87-Jun 97	17-CO,22-MT,3-ND,27-WY	13,433,568.52		
Total Onshore			38,398,035.35		
Total			99,854,047.70	\$	

POTENTIAL LIABILITY	SURETY Released?	AVERAGE INCREASE PER BARREL	ESTIMATED AUDIT HOURS
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X-4

X-5



\$

No
No
No
Yes
No
No
Yes
Yes
No

No
No
No
No

X-4

X-5

